EXHIBIT JJ

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2   _____

3   30(b)(6) DEPOSITION UPON ORAL EXAMINATION OF

4   OFFICE OF THE WASHINGTON STATE AUDITOR

5   LISA WEBER, Ph.D.

6   ALL PARTIES APPEARED REMOTELY VIA ZOOM

7   ***AFTERNOON SESSION***

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13   1:10 P.M.

14   OCTOBER 14, 2022

15   LOCATION OF WITNESS: OLYMPIA, WASHINGTON

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24   REPORTED BY: JUDY STEENBERGEN-WEBB, WA CCR NO. 2495

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 1                    AFTERNOON SESSION

 2          OLYMPIA, WASHINGTON; OCTOBER 14, 2022

 3                        1:10 P.M.

 4                         --OOO--

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 6              (Pursuant to Washington Supreme Court

 7              Order Number 25700-A-1311, a remote

 8              oath was administered by the Certified

 9              Court Reporter.)

10

11                   LISA WEBER, Ph.D.,

12     sworn as a witness by the Certified Court Reporter,

13                  testified as follows:

14

15                      EXAMINATION

16   BY MR. McCURDY:

17        Q.   Dr. Weber, you and Mr. Dunn talked about a

18   logistic regression model; do you remember that?

19        A.   Yes.

20        Q.   Bearing in mind that I majored in history in

21   college, could you explain what a logistic regression

22   model is?

23        A.   Logistic regression is a way of looking at

24   what factors are associated with a particular outcome.

25   So in this case our outcome was whether or not a ballot
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1   was accepted or rejected, and we put a whole bunch of

2   different variables into our model to see which ones

3   seemed to have a higher association with a ballot

4   rejection.

5   Q.   Is it fair to say that it's an attempt to

6   isolate the correlation of one variable by controlling

7   for the effect of others?

8   A.   Yeah.   That would be a good way of putting it.

9   Q.   And I think I understood from your

10 conversation with Mr. Dunn that the State auditor's

11 office began by considering the use of I think the

12 Heckman regression model; is that right?

13   A.   Yes.

14   Q.   Were there other regression models apart from

15 the Heckman model that the State auditor's office

16 considered?

17   A.   No.   Given that an outcome was a binary S

18 note, logistic regression is the appropriate method to

19 use, the question then becomes are there multiple other

20 steps that into that process, and if so, then the

21 Heckman regression would be appropriate.

22   Q.   Did you attempt to assess the fit of the

23 logistic regression model against subsets of the data?

24   A.   No.   I don't think we did that.

25   Q.   Was there a reason not to do that?

1   Q.   Can you give me an example of how you could

2   set up a rejection -- or, I'm sorry, a regression

3   analysis to focus on the rejected ballots?

4   A.   Well, we looked at the outcome. Your outcome

5   variable is a one or a zero, and a regression analysis,

6   and we assigned a value of one to be a rejected ballot.

7   Q.   Okay. Aside from doing that, is there any

8   other kind of particular decision you make on how to do

9   the analysis to address that that -- most ballots are

10 accepted?

11   A.   You mean in the statistical analysis, or in

12 the audit overall?

13   Q.   In the statistical analysis, I think you've

14 told me that, you know, the regression analysis is set

15 up to account for that, and I've never done a

16 regression analysis.

17   So I'm trying to get as much an understanding

18 of how you can set up a regression analysis to account

19 for the notion that the vast majority of ballots are

20 accepted and a small number of ballots are rejected.

21   A.   Without getting into all the mathematics

22 behind it, logistic regressions are used quite commonly

23 in biomedical research and a variety of other fields.

24 For instance, predicting who's going to get, say,

25 cancer, or who's going to die of a heart attack. You

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1   know, vast majority of people don't die of heart

2   attacks.

3   So, you know, it's quite common for this

4   technique to be trying to predict as something that's a

5   low probability of occurrence.

6   Q.   Do the audit's results with respect to race

7   and ethnicity indicate whether the results owe to the

8   cultural factors we talked about that are referenced on

9   Page 20 in the performance audit, or on the other hand

10   to the bias of signature reviewers?

11   A.   No.   Regression is a correlational technique.

12   It just says that something is related to the outcome

13   by higher than chance, but it does not tell you why.

14   We had a lot of discussion about this audit and what

15   really our scope would be.

16   And in conversations with our director, we

17   decided that the why is really more appropriate for

18   researchers to address, not auditors, and they really

19   weren't being asked that either in the mandate.

20   Q.   Does the State auditor's office have a view

21   apart from the statistical analysis of whether any

22   difference in the rejection rates or ballots depend --

23   for different racial groups relates to bias as opposed

24   to what the auditor refers to as cultural factors?

25   A.   I can't speak for the audit office as a whole.

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 1    signature mismatch.

 2         Q.   And to the extent you can, could you explain

 3    what a signature mismatch is?

 4         A.   A signature mismatch is when a ballot comes in

 5    to a voter before you sign an envelope and -- a

 6    security envelope.  And when that ballot gets processed

 7    by the county that it's from, they open the outer

 8    envelope, discard it.  They have the ballot that has

 9    the signature on it.  They look at that signature, pull

10    up on a screen the signature as recorded in the

11    Secretary of State's database on your voter

12    registration record.  And someone with training

13    compares that signature that they see on the envelope

14    to what is in the records and makes a determination of

15    whether or not the same individual signed both

16    locations.

17         Q.   And skipping over to the next column,

18    "unsigned," what is that?

19         A.   That's looking specifically at ballots that

20    were rejected because that location on the ballot where

21    you're supposed to sign that security envelope was not

22    signed.  It was left blank.

23         Q.   Is it fair to say that whether a ballot is

24    unsigned is objectively measurable by the county that

25    receives it?
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1   A.   I suppose there's no way to tell if they

2   signed it in invisible ink and you can't see it.   But,

3   generally, yes, an observation if they do not see a

4   signature on the ballot, they would say it's unsigned.

5   Q.   Meaning that there's no meaningful element of

6   discretion in determining whether a ballot is signed or

7   unsigned?

8   A.   No.

9   Q.   And let me just -- let me ask that question a

10   little differently because it's going to be unclear on

11   the record whether your "no" there is no element of

12   discretion, or whether your "no" was a, no, I disagree

13   with you in the question you asked.

14   Is there any element of discretion of

15   determining whether a ballot is signed or unsigned?

16   A.   I suppose there's always an element of

17   discretion if it's so faint that you can't even tell if

18   it was actually a signature or a smudge, but probably

19   far less ambiguity in making that decision than there

20   are for other reasons such as a signature mismatch.

21   Q.   Okay.   What's an odds ratio?

22   A.   An odds ratio is the likelihood of the events

23   you're trying to predict occurring relative to whatever

24   you set up as your comparison group.

25   So, for example, on Page 55 there, top of it

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1   being Thurston County, it says odds ratio for any

2   reason is 2.755.   That means that voters in Thurston

3   County are 2.7 times more likely to have a ballot

4   rejected than if they're in Yakima.

5   Q.   And what is the standard error as is reflected

6   in that chart? I realize standard error can mean a

7   couple of different things in the world of statistics,

8   generally.

9   A.   The standard error is the band of reliability

10   or -- but the band of an error estimate that there

11   could be around that odds ratio.

12   So when that band of plus, for instance, on

13   that Thurston one, 2.755, and then you have a plus or

14   minus .189 percent, if that does not totally negate the

15   differences, it's considered statistically significant.

16   Q.   Okay. So is it fair to say that at a given

17   confidence level, the range of the odds level is -- and

18   we're still talking at this Thurston County example --

19   is 2.755 plus or minus .198?

20   A.   Yes.

21   Q.   Sticking with that Thurston County example, at

22   what confidence level, meaning at what P value, is that

23   standard error determined here?

24   A.   In this table, you see right above, at the

25   very top there, it says -- darker orange the cell is?

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1   Q.   Yeah.

2   A.   Those shades of orange will tell you what the

3   P value is.

4   Q.   Okay. So the standard error in the Thurston

5   County example you gave is at a P value of .001.

6   Is that --

7   A.   Yes. Uh-huh. Yes. That's the darkest shade

8   of orange on the table.

9   Q.   But if you were to look down at location

10 comparison out of state, the standard error for that

11 value references the mid-tone P value of .01?

12   A.   Yes.

13   Q.   I'd like to direct you to the race and

14 ethnicity chart on Page 55 and to the entry for

15 Hispanic and the odds ratio for signature mismatch.

16   A.   Okay.

17   Q.   Do you see that that's 1.283?

18   A.   Yes.

19   Q.   And the standard error is .031?

20   A.   Correct.

21   Q.   So the odds ratio at the confidence level

22 indicated for that cell is anywhere between 1.252 and

23 1.314, right? And I realize I'm --

24   A.   I didn't do the math, but you have the right

25 approach.

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1   Q.   Okay. So, yeah. So I was going to say I

2   realize I'm putting you in a position to do math in

3   your head.

4   Do you -- if you've got a calculator in front

5   of you, do you want to take a stab and just check my

6   numbers?

7   A.   Okay. I'm getting a lower bound of 1.25 and

8   an upper bound of 1.31.

9   Q.   Okay. And then let's go the same exercise, if

10   you don't mind, Dr. Weber, for the odds ratio and the

11   standard error for Hispanic unsigned.

12   A.   I'm getting a lower value of .963 and an upper

13   value of -- so that can't be right. That's not right.

14   All right. A lower value of 1.143.

15   Q.   Uh-huh.

16   A.   And then an upper value of 1.28.

17   Q.   Is it fair to say that the ranges for the odds

18   ratio of signature mismatch and unsigned overlap,

19   meaning that 1.28 is higher than 1.25?

20   A.   Well, 1.28 is higher than 1.25.

21   Q.   Yeah. So the ranges of possibilities at a

22   given confidence level for these two odds ratios

23   overlap, right?

24   A.   Well, they're predicting different things. So

25   there's no comparison really between one and the other.

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1   Q.   Well, okay.   Let me ask -- let me ask it this

2   way.

3   Is it possible to say, based on this chart,

4   that with statistical significance at the level you've

5   indicated, that the chart indicates, that a ballot from

6   an Hispanic voter is more likely to be rejected than a

7   ballot from a white voter for the reason that it is

8   unsigned as opposed to the reason that the signatures

9   failed to match?

10   A.   No.   It isn't comparing one verus the other.

11   It is saying that the Hispanic voter is almost 21

12   percent more likely to have their ballot rejected for

13   being unsigned than a white voter is.   And an Hispanic

14   voter is about 28 percent more likely to have their

15   ballot rejected for signature match -- mismatch than a

16   white voter is.

17   Q.   Okay.   But that summary is a little bit

18   imprecise, right, because it doesn't account for the

19   standard error for both measurements?

20   A.   Yeah.   Uh-huh.

21   Q.   So would it be fair to say instead that an

22   Hispanic voter is somewhere between 25 and 31 percent

23   more likely than a white voter to have a ballot

24   rejected for signature mismatch; is that fair?

25   A.   Yes.   That's the -- with the band of error

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1   that we're looking at here, that it says that, whatever

2   it was, I think 90, 95 percent, somewhere in there, 90

3   to 95 percent of the time you'd expect, if you ran an

4   analysis with random things coming out, that you would

5   expect to see the same result of where it would come

6   within those values.

7   Q.   And at that same confidence level an Hispanic

8   voter is between 14 percent and 28 percent more likely

9   than a white voter to have their ballot rejected for

10   the reason that it is unsigned, correct?

11   A.   Correct.

12   Q.   With that knowledge in front of you, are you

13   able to say at that confidence level that an Hispanic

14   voter is any more likely to have a ballot rejected, for

15   a discretionary reason, any more likely -- I'm sorry --

16   this is a little bit tricky, so I'm going to start

17   over.

18   At that confidence level are you able to say

19   that the percent chance over which an Hispanic voter is

20   likely to have a signature rejected for mismatch as

21   compared to a white voter differs from the percent

22   chance over which an Hispanic voter is likely to have a

23   signature rejected for being unsigned as opposed to a

24   white voter?

25   A.   It would depend on what level of confidence

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1   level you wanted to say that at. The best point

2   estimate is the value that's under the odds ratio. So

3   if you're willing to tolerate a whole lot of error in

4   making that statement, one is a higher number than the

5   other.

6   In terms of practical significance, if you're

7   looking at it that way, these numbers are pretty

8   similar.

9   Q. Yeah. So as a practical matter, the

10   difference between how Hispanic ballots are treated and

11   white ballots are treated is sort of identical whether

12   it's for an objective reason or a discretionary reason?

13   A. It probably goes beyond what we looked at in

14   this audit to make a conclusionary statement like that.

15   So I'd be hesitant to make a conclusionary statement

16   based on the work that we did in this audit; like that

17   would be something as a methodologist we put in our

18   audio report in that phrasing.

19   Q. Fair enough.

20   Does -- did the results of the audit give you

21   a basis to disagree with the statement?

22   A. The results of the audit tell me that the

23   likelihood of an Hispanic voter getting their signature

24   rejected for signature mismatch is about the same

25   likelihood as them getting it rejected for being

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1   REPORTER'S CERTIFICATE

2

3   I, JUDY STEENBERGEN-WEBB, the undersigned Certified

4   Court Reporter, pursuant to RCW 5.28.010 authorized to

5   administer oaths and affirmations in and for the State of

6   Washington, do hereby certify that the sworn testimony and/or

7   proceedings, a transcript of which is attached, was given

8   before me at the time and place stated therein; that any

9   and/or all witness(es) were duly sworn to testify to the

10   truth; that the sworn testimony and/or proceedings were by me

11   stenographically recorded and transcribed under my

12   supervision, to the best of my ability; that the foregoing

13   transcript contains a full, true, and accurate record of all

14   the sworn testimony and/or proceedings given and occurring at

15   the time and place stated in the transcript; that a review of

16   which was requested; that I am in no way related to any party

17   to the matter, nor to any counsel, nor do I have any financial

18   interest in the event of the cause.

19   WITNESS MY HAND AND SIGNATURE this 28th day of October,

20   2022.

21

22

23   JUDY STEENBERGEN-WEBB, RPR

      Certified Court Reporter, WA CCR #2495

24   judyswebbccrwa@outlook.com

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1   REPORTER'S CERTIFICATE

2

3   I, JUDY STEENBERGEN-WEBB, the undersigned Certified

4   Court Reporter, pursuant to RCW 5.28.010 authorized to

5   administer oaths and affirmations in and for the State of

6   Washington, do hereby certify that the sworn testimony and/or

7   proceedings, a transcript of which is attached, was given

8   before me at the time and place stated therein; that any

9   and/or all witness(es) were duly sworn to testify to the

10   truth; that the sworn testimony and/or proceedings were by me

11   stenographically recorded and transcribed under my

12   supervision, to the best of my ability; that the foregoing

13   transcript contains a full, true, and accurate record of all

14   the sworn testimony and/or proceedings given and occurring at

15   the time and place stated in the transcript; that a review of

16   which was requested; that I am in no way related to any party

17   to the matter, nor to any counsel, nor do I have any financial

18   interest in the event of the cause.

19   WITNESS MY HAND AND SIGNATURE this 28th day of October,

20   2022.

21   *Judy Steenbergen-Webb*

22

23   JUDY STEENBERGEN-WEBB, RPR

      Certified Court Reporter, WA CCR #2495

24   judyswebbccrwa@outlook.com

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